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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,784	12/31/2001	Xiaolin Lu	TI-33671	4099

23494 7590 08/23/2005

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EXAMINER
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TSE, YOUNG TOI

ART UNIT	PAPER NUMBER
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2637

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/038,784	<b>Applicant(s)</b> LU ET AL.	
	<b>Examiner</b> YOUNG T. TSE	<b>Art Unit</b> 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: page 7, line 5, "Receive" should be "receiver" and page 8, line 27, ""one" should be "1". Appropriate correction is required.

### ***Claim Objections***

2. Claims 1-16, 18-20, 24-26 and 29-32 are objected to because of the following informalities:

In claim 1, lines 3 and 4, "a sender sliding window" and "a receiver sliding window" should be "the sender sliding window" and "the receiver sliding window", respectively for clarity. Also see claim 9.

In claim 5, "the packet" should be "the at least one packet".

Claims 2-4 and 6-8 are directly or indirectly depended upon the independent claim 1.

In claim 9, line 8, "the receiving window" should be "the receiver sliding window".

Claims 10-16 are depended upon the independent claim 9.

In claim 18, lines 1-2, "a packet from a higher layer" should be "the packet from the higher layer".

In claim 19, lines 1, 2, and 7, "a packet", "a lower layer", and "a sate" should be "the packet", "the lower layer", and "the sate", respectively.

In claim 20, lines 1-2, "an acknowledgment to a packet" should be "the acknowledgment to the packet".

In claim 24, lines 1, 3 and 6, "a packet" should be "the packet".

In claim 25, line 1, "then" should be deleted and line 4, "a packet" should be "the packet".

In claim 26, lines 1-2, "a periodic" should be "a periodic".

In claim 29, lines 3 and 8, "a transmit buffer" should be "the transmit buffer" and line 13, "packets" should be "packet".

Wherein claim 30 depends upon claim 29.

In claim 31, line 3, "a receive buffer" should be "the receive buffer".

Wherein claim 32 depends upon claim 31.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3, 7, 11 and 17-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3 (line 1), claim 11 (line 1), claim 19 (lines 5 and 6) and claim 32 (line 3), the phrases "the sender" and "the receiver" both lack antecedent basis.

In claim 7, lines 1-2, is "a receiver sliding window" different than "a receiver sliding window" recited in claim 1?

In claim 17, the preamble recites a method for synchronizing a sender packet flow control data structure with a receiver packet flow control data structure, however, the body of the claim does not include the receiver packet flow control data structure to achieve the goal of synchronizing the sender packet flow control data structure with the receiver packet flow control data structure. Also see claim 23 for the sender packet flow control data structure.

Claims 18 and 20-22 depend upon claim 17.

Claims 24-28 depend upon claim 23.

In claim 29, the preamble recites a method for synchronizing a transmit buffer and a receive buffer, however, the body of the claim does not include the receive buffer to achieve the goal of synchronizing the transmit buffer and the receive buffer. Also see claim 31 for transmit buffer.

Wherein claim 30 depends upon claim 29 and claim 32 depends upon claim 31.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohno et al..

Ohno et al. (U.S. Patent No. 6,034,962) discloses a method and apparatus of increasing the network use efficiency of computer communication and reducing the limitation of byte stream in a transmit/receive request, a virtual circuit is established between protocol modules such as applications for providing the communication function between software to mate one transmit request with one receive request. By returning an acknowledgement in a unit of asynchronous transmission/reception, a request which is completed in transmission/reception can be ended immediately, thus permitting efficient data transfer. See abstract.

With respect to claims 1-33, Figures 1-2, 4 and 9-10 show the flow charts of communication between a transmit side and a receive side or a computer to computer. As shown in the Figures, clearly, when the data length of the data handed with the transmit request is larger than a maximum transfer unit (MTU), the data is divided into a plurality of MTU packets and a timer is set packet by packet. When packets are received correctly, the receiving side returns to the transmitting side an acknowledgement (ACK) response including an offset position used to indicate how many bytes in the byte stream are all received correctly, and the transmitting side responds to the information in the ACK to release a corresponding portion of the transmission buffer in the TCP. Then, the receiving side holds the received data in a buffer in the TCP until a receive request from the upper layer is issued. See column 1, lines 39-50.

The operation of Figures 2 and 4 are discussed from column 1, line 51 to column 2, line 15 and column 6, line 30 to column 7, line 33.

In the case of synchronous transmission/reception, data at the latter half in the transmission buffer in the transmit request is copied and held on the buffer on the transmitting terminal. A field indicating that a virtual ACK request is effected is provided in a transmitting packet and this field is set when the final packet of a not-copying portion is transmitted. On the receiving side, if, upon receipt of the packet set with the field indicating that the virtual ACK request is effected, all packets preceding that packet have already been received, the virtual ACK will be returned. On the transmitting side, the next transmit request to the virtual circuit can be carried out upon receipt of the virtual ACK. Further, upon receipt of an ACK, the copy data holding buffer on the transmitting terminal is released. See column 5, lines 5-18.

### ***Conclusion***

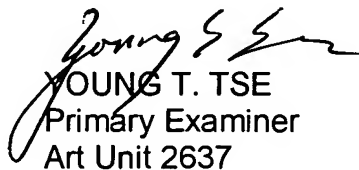
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

References Bushmitch et al., Ohyama et al., Costa et al., Lu et al., and Rosier et al. are related to method and apparatus for transmitting/receiving data packets and synchronization between a transmitter side and a receiver side.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Thursday and alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The Central FAX Number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
YOUNG T. TSE  
Primary Examiner  
Art Unit 2637